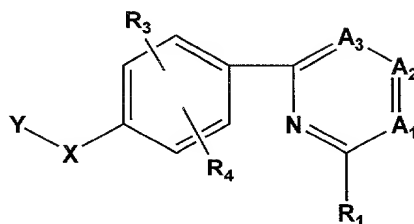


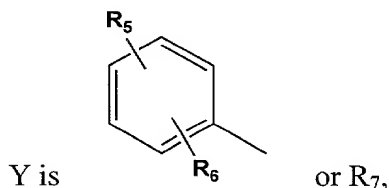
WHAT IS CLAIMED IS:

1. A compound having the Formula I:



or a pharmaceutically acceptable salt, prodrug or solvate thereof,

wherein:



provided that when Y is  $R_7$ ,  $R_1$  is aminocarbonyl;

$A_1$ ,  $A_2$  and  $A_3$  are independently  $CR_2$  or N, provided that  $A_1$ ,  $A_2$  and  $A_3$  are not all N at the same time;

$R_1$  is selected from the group consisting an optionally substituted alkyl, amino, alkylthiol,  $C(O)R_8$ ,  $SO_2R_8$ ,  $OC(O)NH_2$ , 2-imidazoliny, 2-imidazolyl, 3-pyrazolyl, 5-isoxazolyl, and 3-(1,2,4)-triazolyl;

each  $R_2$  is selected from the group consisting of hydrogen, optionally substituted alkyl, alkenyl, or alkynyl, halogen, hydroxy, cycloalkyl, cyano, amino, alkylamino, dialkylamino, alkoxy, aminocarbonyl, alkylaminocarbonyl, arylaminocarbonyl, aralkylaminocarbonyl, alkylcarbonylamino, arylcarbonylamino, and aralkylcarbonylamino; or  $R_1$  and  $R_2$  are taken together with the carbon atoms to which they are attached to form a heterocyclic ring;

$R_3$ ,  $R_4$ ,  $R_5$ , and  $R_6$  are independently selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, halogen, haloalkyl, hydroxyalkyl, hydroxy, nitro, amino, cyano, amide, carboxyalkyl, alkoxyalkyl, ureido,

acylamino, thiol, acyloxy, azido, alkoxy, carboxy, carbonylamido and alkylthiol;

R<sub>7</sub> is an optionally substituted alkyl;

R<sub>8</sub> is selected from the group consisting of alkyl, alkenyl, alkynyl, OR<sub>9</sub>, amino, alkylamino, dialkylamino, alkenylamino, dialkylaminoalkenyl, dialkylaminoalkylamino, dialkylaminoalkenylamino, alkylaminoalkenylamino, hydroxyaminoalkenylamino, cycloalkyl, heterocycloalkyl, cycloalkylalkylamino, heterocycloalkylamino, aryl, arylalkyl, arylalkenyl, arylalkynyl, and arylalkylamino, all of which can be optionally substituted, provided that R<sub>8</sub> is not OR<sub>9</sub> when R<sub>1</sub> is SO<sub>2</sub>R<sub>8</sub>; wherein

R<sub>9</sub> is selected from the group consisting of hydrogen, optionally substituted alkyl, and an alkali metal; and

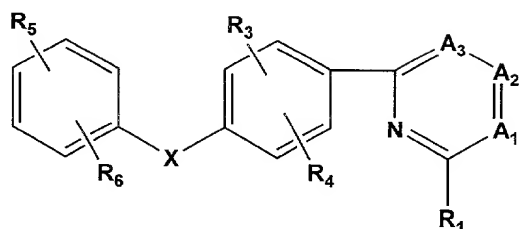
X is one of O, S, NH, or CH<sub>2</sub> when Y is other than R<sub>7</sub>; or

X is one of O, S, NH, CH<sub>2</sub> or absent when Y is R<sub>7</sub>;

with the provisos that:

- 1) R<sub>2</sub> is not methoxy if R<sub>5</sub> is trifluoromethyl, R<sub>6</sub> is H, X is O and R<sub>1</sub> is SO<sub>2</sub>CH<sub>2</sub>Ph;
- 2) R<sub>2</sub> is not NH<sub>2</sub> if R<sub>1</sub> is methylthio, X is O and two of A<sub>1</sub>, A<sub>2</sub> and A<sub>3</sub> are N;
- 3) R<sub>2</sub> is not methyl if R<sub>1</sub> is SO<sub>2</sub>R<sub>8</sub>, wherein R<sub>8</sub> is methylphenyl, R<sub>3</sub> and R<sub>4</sub> are methoxy, X is S and two of A<sub>1</sub>, A<sub>2</sub> and A<sub>3</sub> are N;
- 4) R<sub>2</sub> is not CCl<sub>3</sub> if R<sub>1</sub> is CCl<sub>3</sub>, X is S and two of A<sub>1</sub>, A<sub>2</sub> and A<sub>3</sub> are N;  
or
- 5) R<sub>1</sub> and R<sub>2</sub> are not both NH<sub>2</sub> if X is O or S and two of A<sub>1</sub>, A<sub>2</sub> and A<sub>3</sub> are N.

2. A compound having the Formula II:



or a pharmaceutically acceptable salt, prodrug or solvate thereof,

wherein:

A<sub>1</sub>, A<sub>2</sub> and A<sub>3</sub> are independently CR<sub>2</sub> or N, provided that A<sub>1</sub>, A<sub>2</sub> and A<sub>3</sub> are not all N at the same time;

R<sub>1</sub> is selected from the group consisting an optionally substituted alkyl, amino, alkylthiol, C(O)R<sub>8</sub>, SO<sub>2</sub>R<sub>8</sub>, OC(O)NH<sub>2</sub>, 2-imidazolynyl, 2-imidazolyl, 3-pyrazolyl, 5-isoxazolyl, and 3-(1,2,4)-triazolyl;

each R<sub>2</sub> is selected from the group consisting of hydrogen, optionally substituted alkyl, alkenyl, or alkynyl, halogen, hydroxy, cycloalkyl, cyano, amino, alkylamino, dialkylamino, alkoxy, aminocarbonyl, alkylaminocarbonyl, arylaminocarbonyl, aralkylaminocarbonyl, alkylcarbonylamino, arylcarbonylamino, and aralkylcarbonylamino; or R<sub>1</sub> and R<sub>2</sub> are taken together with the carbon atoms to which they are attached to form a heterocyclic ring;

R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, and R<sub>6</sub> are independently selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, halogen, haloalkyl, hydroxyalkyl, hydroxy, nitro, amino, cyano, amide, carboxyalkyl, alkoxyalkyl, ureido, acylamino, thiol, acyloxy, azido, alkoxy, carboxy, carbonylamido and alkylthiol; and

R<sub>8</sub> is selected from the group consisting of alkyl, alkenyl, alkynyl, OR<sub>9</sub>, amino, alkylamino, dialkylamino, alkenylamino, dialkylaminoalkenyl, dialkylaminoalkylamino, dialkylaminoalkenylamino, alkylaminoalkenylamino, hydroxyaminoalkenylamino, cycloalkyl, heterocycloalkyl, cycloalkylalkylamino, heterocycloalkylamino, aryl, arylalkyl, arylalkenyl,

arylalkynyl, and arylalkylamino, all of which can be optionally substituted, provided that  $R_8$  is not  $OR_9$  when  $R_1$  is  $SO_2R_8$ ; wherein

$R_9$  is selected from the group consisting of hydrogen, optionally substituted alkyl, and an alkali metal; and

X is one of O, S, NH, or  $CH_2$ ;

with the provisos that:

- 1)  $R_2$  is not methoxy if  $R_5$  is trifluoromethyl,  $R_6$  is H, X is O and  $R_1$  is  $SO_2CH_2Ph$ ;
- 2)  $R_2$  is not  $NH_2$  if  $R_1$  is methylthio, X is O and two of  $A_1$ ,  $A_2$  and  $A_3$  are N;
- 3)  $R_2$  is not methyl if  $R_1$  is  $SO_2R_8$ , wherein  $R_8$  is methylphenyl,  $R_3$  and  $R_4$  are methoxy, X is S and two of  $A_1$ ,  $A_2$  and  $A_3$  are N;
- 4)  $R_2$  is not  $CCl_3$  if  $R_1$  is  $CCl_3$ , X is S and two of  $A_1$ ,  $A_2$  and  $A_3$  are N;  
or
- 5)  $R_1$  and  $R_2$  are not both  $NH_2$  if X is O or S and two of  $A_1$ ,  $A_2$  and  $A_3$  are N.

3. The compound of claim 2, wherein  $A_1$ ,  $A_2$  and  $A_3$  are each  $CR_2$ ; or  $A_1$  is N and  $A_2$  and  $A_3$  are  $CR_2$ ; or  $A_3$  is N and  $A_1$  and  $A_2$  are  $CR_2$ ; or  $A_2$  is N and  $A_1$  and  $A_3$  are  $CR_2$ ; or  $A_1$  and  $A_3$  are N and  $A_2$  is  $CR_2$ .

4. The compound of claim 2, wherein  $R_1$  is selected from the group consisting of an alkyl optionally substituted by halogen or hydroxy,  $C(O)R_8$ ,  $SO_2R_8$ , 2-imidazolyl, 2-imidazolyl, 3-pyrazolyl, and 5-isoxazolyl, wherein  $R_8$  is as defined in claim 2, provided that  $R_8$  is not  $OR_9$  when  $R_1$  is  $SO_2R_8$ .

5. The compound of claim 4, wherein  $R_8$  is selected from the group consisting of alkyl, alkenyl,  $OR_9$ , amino, alkylamino, dialkylamino, alkenylamino, dialkylaminoalkenyl, dialkylaminoalkylamino, and

heterocycloalkylamino, all of which can be optionally substituted, and wherein R<sub>9</sub> is as defined in claim 2.

6. The compound of claim 2, wherein R<sub>2</sub> is selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aminoalkyl, amino, hydroxyalkyl, alkoxy, aminocarbonyl, alkylaminocarbonyl, arylaminocarbonyl, aralkylaminocarbonyl, alkylcarbonylamino, arylcarbonylamino, and aralkylcarbonylamino.

7. The compound of claim 6, wherein R<sub>2</sub> is selected from the group consisting of hydrogen, alkyl, alkoxy, aminoalkyl and aminocarbonyl.

8. The compound of claim 2, wherein R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, and R<sub>6</sub> are independently selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, halogen, haloalkyl, hydroxyalkyl, hydroxy, nitro, amino, and cyano.

9. The compound of claim 8, wherein R<sub>3</sub> and R<sub>4</sub> are both hydrogen and R<sub>5</sub> and R<sub>6</sub> are independently selected from the group consisting of hydrogen, alkyl, halogen, haloalkyl, and nitro.

10. The compound of claim 2, wherein X is O or S.

11. The compound of claim 10, wherein X is O.

12. The compound of claim 2, wherein R<sub>2</sub> is hydrogen, X is O or S and R<sub>1</sub> is aminocarbonyl.

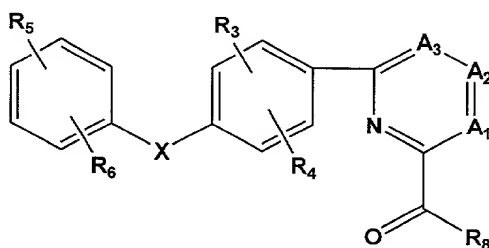
13. The compound of claim 2, wherein A<sub>2</sub> is CR<sub>2</sub>, wherein R<sub>2</sub> is other than H and A<sub>1</sub> and A<sub>3</sub> are each CH.

14. The compound of claim 2, wherein  $A_1$  is N,  $A_2$  is  $CR_2$ , wherein  $R_2$  is other than H and  $A_3$  is CH.

15. The compound of claim 2, wherein  $A_3$  is N,  $A_2$  is  $CR_2$ , wherein  $R_2$  is other than H and  $A_1$  is CH.

16. The compound of claim 2, wherein  $A_2$  is N,  $A_1$  is  $CR_2$ , wherein  $R_2$  is other than H, and  $A_3$  is CH.

17. The compound of claim 2, having the Formula III:



or a pharmaceutically acceptable salt, prodrug or solvate thereof, wherein;

$A_1$ - $A_3$ ,  $R_2$ - $R_6$ ,  $R_8$  and X are as defined in claim 2.

18. The compound of claim 17, wherein  $A_1$ ,  $A_2$  and  $A_3$  are each  $CR_2$ ; or  $A_1$  is N and  $A_2$  and  $A_3$  are  $CR_2$ ; or  $A_3$  is N and  $A_1$  and  $A_2$  are  $CR_2$ ; or  $A_2$  is N and  $A_1$  and  $A_3$  are  $CR_2$ ; or  $A_1$  and  $A_3$  are N and  $A_2$  is  $CR_2$ .

19. The compound of claim 17, wherein  $R_2$  is selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aminoalkyl, amino, hydroxyalkyl, alkoxy, aminocarbonyl, alkylaminocarbonyl, arylaminocarbonyl, aralkylaminocarbonyl, alkylcarbonylamino, arylcarbonylamino, and aralkylcarbonylamino.

20. The compound of claim 19, wherein  $R_2$  is selected from the group consisting of hydrogen, alkyl, alkoxy, aminoalkyl and aminocarbonyl.

21. The compound of claim 17, wherein  $R_3$ ,  $R_4$ ,  $R_5$ , and  $R_6$  are independently selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, halogen, haloalkyl, hydroxyalkyl, hydroxy, nitro, amino, and cyano.

22. The compound of claim 21, wherein  $R_3$  and  $R_4$  are both hydrogen and  $R_5$  and  $R_6$  are independently selected from the group consisting of hydrogen, alkyl, halogen, haloalkyl, and nitro.

23. The compound of claim 17, wherein  $R_8$  is selected from the group consisting of alkyl, alkenyl,  $OR_9$ , amino, alkylamino, dialkylamino, alkenylamino, dialkylaminoalkenyl, dialkylaminoalkylamino, and heterocycloalkylamino, all of which can be optionally substituted, provided that  $R_8$  is not  $OR_9$  when  $R_1$  is  $SO_2R_8$ , and wherein  $R_9$  is as defined in claim 2.

24. The compound of claim 17, wherein X is O or S.

25. The compound of claim 24, wherein X is O.

26. The compound of claim 17, wherein  
X is O;

$A_1$ ,  $A_2$  and  $A_3$  are each  $CR_2$ ; or  $A_1$  is N and  $A_2$  and  $A_3$  are  $CR_2$ ; or  $A_3$  is N and  $A_1$  and  $A_2$  are  $CR_2$ ; or  $A_2$  is N and  $A_1$  and  $A_3$  are  $CR_2$ ; or  $A_1$  and  $A_3$  are N and  $A_2$  is  $CR_2$ ; wherein

$R_2$  is selected from the group consisting of hydrogen, alkyl, alkoxy, aminoalkyl, and aminocarbonyl;

$R_3$  and  $R_4$  are both hydrogen;

$R_5$  and  $R_6$  are independently selected from the group consisting of hydrogen, alkyl, halogen, haloalkyl, and nitro; and

R<sub>8</sub> is amino.

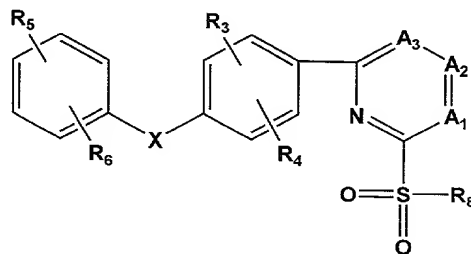
27. The compound of claim 17, wherein A<sub>2</sub> is CR<sub>2</sub>, wherein R<sub>2</sub> is other than H and A<sub>1</sub> and A<sub>3</sub> are each CH.

28. The compound of claim 17, wherein A<sub>1</sub> is N, A<sub>2</sub> is CR<sub>2</sub>, wherein R<sub>2</sub> is other than H and A<sub>3</sub> is CH.

29. The compound of claim 17, wherein A<sub>3</sub> is N, A<sub>2</sub> is CR<sub>2</sub>, wherein R<sub>2</sub> is other than H and A<sub>1</sub> is CH.

30. The compound of claim 17, wherein A<sub>2</sub> is N, A<sub>1</sub> is CR<sub>2</sub>, wherein R<sub>2</sub> is other than H, and A<sub>3</sub> is CH.

31. The compound of claim 2, having Formula IV:



or a pharmaceutically acceptable salt, prodrug or solvate thereof;  
wherein:

A<sub>1</sub>-A<sub>3</sub>, R<sub>2</sub>-R<sub>6</sub>, and X are as defined in claim 2 and

R<sub>8</sub> is selected from the group consisting of alkyl, alkenyl, alkynyl, amino, alkylamino, dialkylamino, alkenylamino, dialkylaminoalkenyl, dialkylaminoalkylamino, cycloalkyl, heterocycloalkyl, cycloalkylalkylamino, heterocycloalkylamino, aryl, arylalkyl, arylalkenyl, arylalkynyl, and arylalkylamino, all of which can be optionally substituted.

32. The compound of claim 31, wherein A<sub>1</sub>, A<sub>2</sub> and A<sub>3</sub> are each CR<sub>2</sub>; or A<sub>1</sub> is N and A<sub>2</sub> and A<sub>3</sub> are CR<sub>2</sub>; or A<sub>3</sub> is N and A<sub>1</sub> and A<sub>2</sub> are CR<sub>2</sub>; or



A<sub>2</sub> is N and A<sub>1</sub> and A<sub>3</sub> are CR<sub>2</sub>; or A<sub>1</sub> and A<sub>3</sub> are N and A<sub>2</sub> is CR<sub>2</sub>, and R<sub>2</sub> is selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aminoalkyl, amino, hydroxyalkyl, alkoxy, aminocarbonyl, alkylaminocarbonyl, arylaminocarbonyl, aralkylaminocarbonyl, alkylcarbonylamino, arylcarbonylamino, and aralkylcarbonylamino.

33. The compound of claim 32, wherein R<sub>2</sub> is selected from the group consisting of hydrogen, alkyl, alkoxy, aminoalkyl and aminocarbonyl.

34. The compound of claim 31, wherein R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, and R<sub>6</sub> are independently selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, halogen, haloalkyl, hydroxyalkyl, hydroxy, nitro, amino, and cyano.

35. The compound of claim 34, wherein R<sub>3</sub> and R<sub>4</sub> are both hydrogen and R<sub>5</sub> and R<sub>6</sub> are independently selected from the group consisting of hydrogen, alkyl, halogen, haloalkyl, and nitro.

36. The compound of claim 31, wherein R<sub>8</sub> is selected from the group consisting of alkyl, alkenyl, amino, alkylamino, dialkylamino, alkenylamino, dialkylaminoalkenyl, and heterocycloalkylamino, all of which can be optionally substituted.

37. The compound of claim 31, wherein X is O or S.

38. The compound of claim 37, wherein X is O.

39. A compound of claim 2, wherein said compound is:

4-[4-(4-fluorophenoxy)phenyl]pyrimidine-2-carboxamide;

4-[4-(4-nitrophenoxy)phenyl]pyrimidine-2-carboxamide;

4-[4-(4-methoxyphenoxy)phenyl]pyrimidine-2-carboxamide;

4-[4-(4-trifluoromethylphenoxy)phenyl]pyrimidine-2-carboxamide;

4-[4-(3-chloro-2-cyanophenoxy)phenyl]pyrimidine-2-carboxamide;  
4-[4-(4-chloro-2-fluorophenoxy)phenyl]pyrimidine-2-carboxamide;  
4-[4-(2,4-difluorophenoxy)phenyl]pyrimidine-2-carboxamide;  
4-[4-(2-chloro-4-fluorophenoxy)phenyl]pyrimidine-2-carboxamide;  
1-[4-[4-(4-fluorophenoxy)phenyl]pyrimidine-2-yl]-ethanone;  
2-[4-(4-fluorophenoxy)phenyl]pyrimidine-4-carboxamide;  
2-[4-(4-fluorophenoxy)phenyl]-4-methylpyrimidine;  
2-methyl-4-[4-(4-fluorophenoxy)phenyl]pyrimidine;  
4-[4-(4-fluorophenoxy)phenyl]pyrimidine-2-carboxylic acid;  
4-[4-(4-fluorophenoxy)phenyl]pyrimidine-2-carboxylic acid sodium  
salt;  
4-[4-(4-fluorophenoxy)phenyl]pyrimidine-2-carboxylic acid  
methylamide;  
4-[4-(4-fluorophenoxy)phenyl]pyrimidine-2-carboxylic acid  
dimethylamide;  
4-[4-(4-fluorophenoxy)phenyl]pyrimidine-2-carboxylic acid *tert*-  
butylamide;  
2-[4-(4-chloro-2-fluorophenoxy)phenyl]pyrimidine-4-carboxamide;  
2-[4-(4-chloro-2-fluorophenoxy)phenyl]pyrimidine-4-carboxylic acid;  
2-(4-phenoxyphenyl)-6-(dimethylamino)pyrimidine-4-carboxylic acid  
dimethylamide;  
4-[4-(4-fluorophenoxy)phenyl]pyrimidine-2-carboxylic acid 2-  
hydroxyethylamide;  
4-[4-(4-fluorophenoxy)phenyl]pyrimidine-2-carboxylic acid  
hydroxymethyleneamide;  
2-(2-hydroxyprop-2-yl)-4-[4-(4-fluorophenoxy)phenyl]pyrimidine;  
4-[4-(2,4-difluorophenoxy)phenyl]pyrimidine-2-carboxylic acid 2-  
morpholin-4-yl-ethyl amide;  
2-(4,5-dihydro-1H-imidazol-2-yl)-4-[4-(4-fluorophenoxy)phenyl]-  
pyrimidine;  
2-(3-pyrazolyl)-4-[4-(4-fluorophenoxy)phenyl]pyrimidine;

2-(5-isoxazolyl)-4-[4-(4-fluorophenoxy)phenyl]pyrimidine;  
2-(1-methyl-3-pyrazolyl)-4-[4-(4-fluorophenoxy)phenyl]pyrimidine;  
2-[4-(4-chloro-2-fluorophenoxy)phenyl]pyrimidine-4-carboxylic acid  
methylamide;

3-dimethylamino-1-{4-[4-(4-fluorophenoxy)phenyl]pyrimidin-2-  
yl]propenone;

2-thiomethyl-4-[4-(4-fluorophenoxy)phenyl]pyrimidine;  
2-methanesulfonyl-4-[4-(4-fluorophenoxy)phenyl]pyrimidine;  
2-[4-(4-chloro-2-fluorophenoxy)phenyl]-4-methyl-pyrimidine;  
4-[4-(4-fluorophenoxy)-3-fluorophenyl]pyrimidine-2-carboxamide;  
2-[4-(4-fluorophenoxy)-3-fluorophenyl]pyrimidine-4-carboxamide;  
2-methyl-6-(4-phenoxyphenyl)pyridine;  
6-(4-phenoxyphenyl)pyridine-2-carboxamide;  
2-methyl-6-[4-(4-fluorophenoxy)phenyl]pyridine;  
6-(4-phenoxyphenyl)pyridine-2-carboxylic acid;  
6-(4-phenoxyphenyl)pyridine-2-carboxylic acid methylamide;  
6-[4-(4-fluorophenoxy)phenyl]pyridine-2-carboxamide;  
6-[4-(2,4-difluorophenoxy)phenyl]pyridine-2-carboxamide;  
6-[4-(4-chloro-2-fluorophenoxy)phenyl]pyridine-2-carboxamide;  
6-[4-(4-fluorophenoxy)-3-fluorophenyl]pyridine-2-carboxamide;  
6-[4-(4-trifluoromethylphenoxy)phenyl]pyridine-2-carboxamide;  
6-(4-phenoxyphenyl)pyrazine-2-carboxamide;  
3,5-diamino-6-(4-phenoxyphenyl)pyrazine-2-carboxamide; or  
2-[4-(4-nitrophenoxy)phenyl]-4-methyl-[1,3,5]-triazine,  
or a pharmaceutically acceptable salt, prodrug or solvate thereof.

40. A compound of claim 1, wherein said compound is:

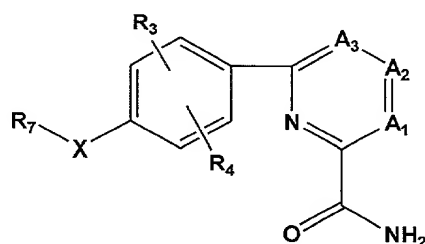
6-[4-(4-fluorophenoxy)phenyl]pyridine carboxylic acid N-  
piperidylethylamide;

6-(4-*tert*-butylphenyl)pyridine-2-carboxamide;

6-(4-*n*-butylphenyl)pyridine-2-carboxamide;

6-(4-*i*-propylphenyl)pyridine-2-carboxamide;  
 6-(4-thiomethylphenyl)pyridine-2-carboxamide;  
 6-(4-ethoxyphenyl)pyridine-2-carboxamide; or  
 6-(4-methoxyphenyl)pyridine-2-carboxamide,  
 or a pharmaceutically acceptable salt, prodrug or solvate thereof.

41. The compound of claim 1, having the Formula V:



or a pharmaceutically acceptable salt, prodrug or solvate thereof,  
 wherein;

A<sub>1</sub>-A<sub>3</sub>, R<sub>2</sub>-R<sub>4</sub>, and R<sub>7</sub> are as defined in claim 1; and

X is one of O, S, NH, CH<sub>2</sub> or absent.

42. The compound of claim 41, wherein A<sub>1</sub>, A<sub>2</sub> and A<sub>3</sub> are each CR<sub>2</sub>; or A<sub>1</sub> is N and A<sub>2</sub> and A<sub>3</sub> are CR<sub>2</sub>; or A<sub>3</sub> is N and A<sub>1</sub> and A<sub>2</sub> are CR<sub>2</sub>; or A<sub>2</sub> is N and A<sub>1</sub> and A<sub>3</sub> are CR<sub>2</sub>; or A<sub>1</sub> and A<sub>3</sub> are N and A<sub>2</sub> is CR<sub>2</sub>.

43. The compound of claim 41, wherein R<sub>7</sub> is a C<sub>1-6</sub> alkyl optionally substituted with one or more of halogen, hydroxy, nitro, amino, cyano and alkoxy.

44. The compound of claim 41, wherein R<sub>2</sub> is selected from the group consisting of hydrogen, alkyl, alkoxy, aminoalkyl and aminocarbonyl.

45. The compound of claim 41, wherein  $R_3$  and  $R_4$  are independently selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, halogen, haloalkyl, hydroxyalkyl, hydroxy, nitro, amino, and cyano.

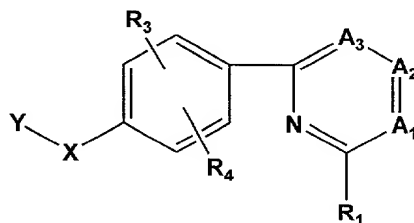
46. The compound of claim 45, wherein  $R_3$  and  $R_4$  are both hydrogen.

47. The compound of claim 41, wherein X is O or S.

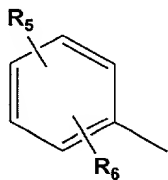
48. The compound of claim 47, wherein X is O.

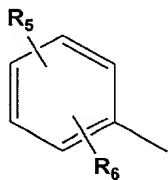
49. A compound of claim 41, wherein said compound is 6-[(4-trifluoromethoxy)phenyl]pyridine-2-carboxamide or a pharmaceutically acceptable salt, prodrug or solvate thereof.

50. A pharmaceutical composition, comprising the compound of formula:



or a pharmaceutically acceptable salt, prodrug or solvate thereof,  
wherein:



Y is  or  $R_7$ , provided that when Y is  $R_7$ ,  $R_1$  is aminocarbonyl;

A<sub>1</sub>, A<sub>2</sub> and A<sub>3</sub> are independently CR<sub>2</sub> or N, provided that A<sub>1</sub>, A<sub>2</sub> and A<sub>3</sub> are not all N at the same time;

R<sub>1</sub> is selected from the group consisting an optionally substituted alkyl, amino, alkylthiol, C(O)R<sub>8</sub>, SO<sub>2</sub>R<sub>8</sub>, OC(O)NH<sub>2</sub>, 2-imidazoliny, 2-imidazolyl, 3-pyrazolyl, 5-isoxazolyl, and 3-(1,2,4)-triazolyl;

each R<sub>2</sub> is selected from the group consisting of hydrogen, optionally substituted alkyl, alkenyl, or alkynyl, halogen, hydroxy, cycloalkyl, cyano, amino, alkylamino, dialkylamino, alkoxy, aminocarbonyl, alkylaminocarbonyl, arylaminocarbonyl, aralkylaminocarbonyl, alkylcarbonylamino, arylcarbonylamino, and aralkylcarbonylamino; or R<sub>1</sub> and R<sub>2</sub> are taken together with the carbon atoms to which they are attached to form a heterocyclic ring;

R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, and R<sub>6</sub> are independently selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, halogen, haloalkyl, hydroxyalkyl, hydroxy, nitro, amino, cyano, amide, carboxyalkyl, alkoxyalkyl, ureido, acylamino, thiol, acyloxy, azido, alkoxy, carboxy, carbonylamido and alkylthiol;

R<sub>7</sub> is an optionally substituted alkyl;

R<sub>8</sub> is selected from the group consisting of alkyl, alkenyl, alkynyl, OR<sub>9</sub>, amino, alkylamino, dialkylamino, alkenylamino, dialkylaminoalkenyl, dialkylaminoalkylamino, dialkylaminoalkenylamino, alkylaminoalkenylamino, hydroxyaminoalkenylamino, cycloalkyl, heterocycloalkyl, cycloalkylalkylamino, heterocycloalkylamino, aryl, arylalkyl, arylalkenyl, arylalkynyl, and arylalkylamino, all of which can be optionally substituted, provided that R<sub>8</sub> is not OR<sub>9</sub> when R<sub>1</sub> is SO<sub>2</sub>R<sub>8</sub>; wherein

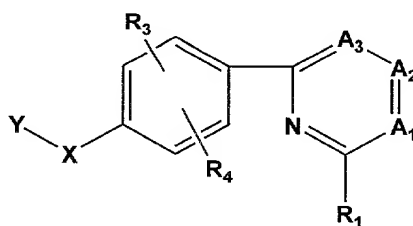
R<sub>9</sub> is selected from the group consisting of hydrogen, optionally substituted alkyl, and an alkali metal; and

X is one of O, S, NH, or CH<sub>2</sub> when Y is other than R<sub>7</sub>; or

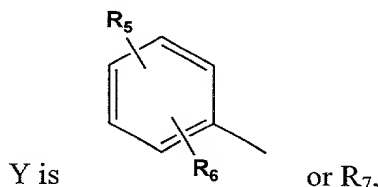
X is one of O, S, NH, CH<sub>2</sub> or absent when Y is R<sub>7</sub>; and a pharmaceutically acceptable carrier or diluent.

51. The composition of claim 50, wherein the compound is as claimed in any one of claims 1-49.

52. A method of treating a disorder responsive to the blockade of sodium channels in a mammal suffering therefrom, comprising administering to a mammal in need of such treatment an effective amount of a compound of formula:



or a pharmaceutically acceptable salt, prodrug or solvate thereof,  
wherein:



provided that when Y is R<sub>7</sub>, R<sub>1</sub> is aminocarbonyl;

A<sub>1</sub>, A<sub>2</sub> and A<sub>3</sub> are independently CR<sub>2</sub> or N, provided that A<sub>1</sub>, A<sub>2</sub> and A<sub>3</sub> are not all N at the same time;

R<sub>1</sub> is selected from the group consisting an optionally substituted alkyl, amino, alkylthiol, C(O)R<sub>8</sub>, SO<sub>2</sub>R<sub>8</sub>, OC(O)NH<sub>2</sub>, 2-imidazoliny, 2-imidazolyl, 3-pyrazolyl, 5-isoxazolyl, and 3-(1,2,4)-triazolyl;

each R<sub>2</sub> is selected from the group consisting of hydrogen, optionally substituted alkyl, alkenyl, or alkynyl, halogen, hydroxy, cycloalkyl, cyano, amino, alkylamino, dialkylamino, alkoxy, aminocarbonyl, alkylaminocarbonyl, arylaminocarbonyl, aralkylaminocarbonyl, alkylcarbonylamino, arylcarbonylamino, and aralkylcarbonylamino; or R<sub>1</sub> and R<sub>2</sub> are taken together with the carbon atoms to which they are attached to form a heterocyclic ring;

R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, and R<sub>6</sub> are independently selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, halogen, haloalkyl, hydroxyalkyl, hydroxy, nitro, amino, cyano, amide, carboxyalkyl, alkoxyalkyl, ureido, acylamino, thiol, acyloxy, azido, alkoxy, carboxy, carbonylamido and alkylthiol;

R<sub>7</sub> is an optionally substituted alkyl;

R<sub>8</sub> is selected from the group consisting of alkyl, alkenyl, alkynyl, OR<sub>9</sub>, amino, alkylamino, dialkylamino, alkenylamino, dialkylaminoalkenyl, dialkylaminoalkylamino, dialkylaminoalkenylamino, alkylaminoalkenylamino, hydroxyaminoalkenylamino, cycloalkyl, heterocycloalkyl, cycloalkylalkylamino, heterocycloalkylamino, aryl, arylalkyl, arylalkenyl, arylalkynyl, and arylalkylamino, all of which can be optionally substituted, provided that R<sub>8</sub> is not OR<sub>9</sub> when R<sub>1</sub> is SO<sub>2</sub>R<sub>8</sub>; wherein

R<sub>9</sub> is selected from the group consisting of hydrogen, optionally substituted alkyl, and an alkali metal; and

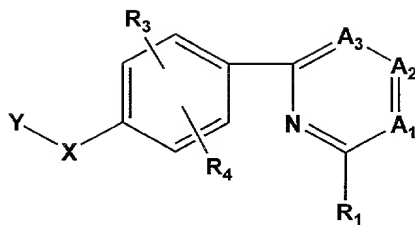
X is one of O, S, NH, or CH<sub>2</sub> when Y is other than R<sub>7</sub>; or

X is one of O, S, NH, CH<sub>2</sub> or absent when Y is R<sub>7</sub>.

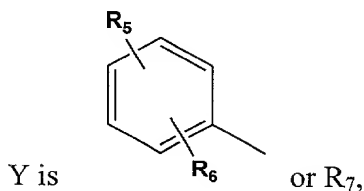
53. The method of claim 52, wherein the compound administered is as claimed in any one of the claims 1-49.

54. A method for treating, preventing or ameliorating neuronal loss following global and focal ischemia; treating, preventing or ameliorating neurodegenerative conditions; treating, preventing or ameliorating pain or tinnitus; treating, preventing or ameliorating manic depression; providing local anesthesia; or treating arrhythmias, or treating convulsions, comprising administering to a mammal in need of such treatment an effective amount of a compound formula:





or a pharmaceutically acceptable salt, prodrug or solvate thereof,  
wherein:



provided that when Y is R<sub>7</sub>, R<sub>1</sub> is aminocarbonyl;

A<sub>1</sub>, A<sub>2</sub> and A<sub>3</sub> are independently CR<sub>2</sub> or N, provided that A<sub>1</sub>, A<sub>2</sub> and A<sub>3</sub> are not all N at the same time;

R<sub>1</sub> is selected from the group consisting an optionally substituted alkyl, amino, alkylthiol, C(O)R<sub>8</sub>, SO<sub>2</sub>R<sub>8</sub>, OC(O)NH<sub>2</sub>, 2-imidazolyl, 2-imidazolyl, 3-pyrazolyl, 5-isoxazolyl, and 3-(1,2,4)-triazolyl;

each R<sub>2</sub> is selected from the group consisting of hydrogen, optionally substituted alkyl, alkenyl, or alkynyl, halogen, hydroxy, cycloalkyl, cyano, amino, alkylamino, dialkylamino, alkoxy, aminocarbonyl, alkylaminocarbonyl, arylaminocarbonyl, aralkylaminocarbonyl, alkylcarbonylamino, arylcarbonylamino, and aralkylcarbonylamino; or R<sub>1</sub> and R<sub>2</sub> are taken together with the carbon atoms to which they are attached to form a heterocyclic ring;

R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, and R<sub>6</sub> are independently selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, halogen, haloalkyl, hydroxyalkyl, hydroxy, nitro, amino, cyano, amide, carboxyalkyl, alkoxyalkyl, ureido, acylamino, thiol, acyloxy, azido, alkoxy, carboxy, carbonylamido and alkylthiol;

R<sub>7</sub> is an optionally substituted alkyl;

R<sub>8</sub> is selected from the group consisting of alkyl, alkenyl, alkynyl, OR<sub>9</sub>, amino, alkylamino, dialkylamino, alkenylamino, dialkylaminoalkenyl, dialkylaminoalkylamino, dialkylaminoalkenylamino, alkylaminoalkenylamino, hydroxyaminoalkenylamino, cycloalkyl, heterocycloalkyl, cycloalkylalkylamino, heterocycloalkylamino, aryl, arylalkyl, arylalkenyl, arylalkynyl, and arylalkylamino, all of which can be optionally substituted, provided that R<sub>8</sub> is not OR<sub>9</sub> when R<sub>1</sub> is SO<sub>2</sub>R<sub>8</sub>; wherein

R<sub>9</sub> is selected from the group consisting of hydrogen, optionally substituted alkyl, and an alkali metal; and

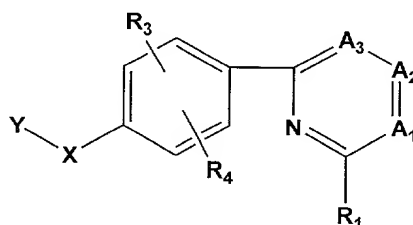
X is one of O, S, NH, or CH<sub>2</sub> when Y is other than R<sub>7</sub>; or

X is one of O, S, NH, CH<sub>2</sub> or absent when Y is R<sub>7</sub>.

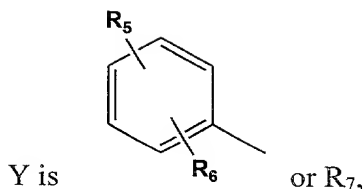
55. The method of claim 54, wherein the compound administered is as claimed in any one of claims 1-49.

56. The method of claim 54, wherein the method is for treating, preventing or ameliorating pain and said pain is one of neuropathic pain, surgical pain or chronic pain.

57. A method of alleviating or preventing seizure activity in an animal subject, comprising administering to said animal in need of such treatment an effective amount of a compound of formula:



or a pharmaceutically acceptable salt, prodrug or solvate thereof, wherein:



provided that when Y is R<sub>7</sub>, R<sub>1</sub> is aminocarbonyl;

A<sub>1</sub>, A<sub>2</sub> and A<sub>3</sub> are independently CR<sub>2</sub> or N, provided that A<sub>1</sub>, A<sub>2</sub> and A<sub>3</sub> are not all N at the same time;

R<sub>1</sub> is selected from the group consisting an optionally substituted alkyl, amino, alkylthiol, C(O)R<sub>8</sub>, SO<sub>2</sub>R<sub>8</sub>, OC(O)NH<sub>2</sub>, 2-imidazoliny, 2-imidazolyl, 3-pyrazolyl, 5-isoxazolyl, and 3-(1,2,4)-triazolyl;

each R<sub>2</sub> is selected from the group consisting of hydrogen, optionally substituted alkyl, alkenyl, or alkynyl, halogen, hydroxy, cycloalkyl, cyano, amino, alkylamino, dialkylamino, alkoxy, aminocarbonyl, alkylaminocarbonyl, arylaminocarbonyl, aralkylaminocarbonyl, alkylcarbonylamino, arylcarbonylamino, and aralkylcarbonylamino; or R<sub>1</sub> and R<sub>2</sub> are taken together with the carbon atoms to which they are attached to form a heterocyclic ring;

R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, and R<sub>6</sub> are independently selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, halogen, haloalkyl, hydroxyalkyl, hydroxy, nitro, amino, cyano, amide, carboxyalkyl, alkoxyalkyl, ureido, acylamino, thiol, acyloxy, azido, alkoxy, carboxy, carbonylamido and alkylthiol;

R<sub>7</sub> is an optionally substituted alkyl;

R<sub>8</sub> is selected from the group consisting of alkyl, alkenyl, alkynyl, OR<sub>9</sub>, amino, alkylamino, dialkylamino, alkenylamino, dialkylaminoalkenyl, dialkylaminoalkylamino, dialkylaminoalkenylamino, alkylaminoalkenylamino, hydroxyaminoalkenylamino, cycloalkyl, heterocycloalkyl, cycloalkylalkylamino, heterocycloalkylamino, aryl, arylalkyl, arylalkenyl, arylalkynyl, and arylalkylamino, all of which can be optionally substituted, provided that R<sub>8</sub> is not OR<sub>9</sub> when R<sub>1</sub> is SO<sub>2</sub>R<sub>8</sub>; wherein

X is one of O, S, NH, or CH<sub>2</sub> when Y is other than R<sub>7</sub>; or

58. The method of claim 57, wherein the compound administered is as claimed in any one of claims 1-49.